



## An exciting & challenging inflection point in our energy future



Over the past ten years at least R200 billion has been invested in building renewable energy projects in South Africa under the initial four bid windows of the government's REIPPP Programme.

Whilst the country has been battling the costs of increased load shedding, there have been some encouraging steps forward in terms of opening up the sector to private power investment. Several farreaching interventions have been announced by government, including a doubling in the energy allocation for the next bid window of the REIPPP Programme, the scrapping of the 100 MW licence exemption threshold for distributed generators that will allow uncapped new power plants to be constructed by the private sector and a proposed feed-in tariff for self-generating households and businesses.

However, South Africa is running out of time to act given the deteriorating performance of Eskom's aging power plants and significant cost to the economy for every stage of load shedding. Progress by government with implementing the new energy plans has been frustratingly slow and, in the meantime, the private sector has pushed ahead with their preparations to construct these projects in expectation of the required regulatory processes with NERSA and Eskom being concluded soon.

It is no secret that Eskom's historical dominance in supplying South Africa's energy needs from its own generation plants is on a managed decline. Nonetheless, the utility will still have an important role to play in the energy landscape in future, by managing the national transmission network, repurposing its existing coal stations and leasing its grid-ready land to private power projects, including renewables and natural gas driven technology. Battery storage investment proposals from the private sector are also in the planned power procurement plans for Eskom.

#### In this report

In this seventh bi-annual report, we look more closely at the planned interventions to arrest the seemingly dire energy situation in South Africa, compared to actual progress made to date. Some of the delays are due to government's slow decision-making and implementation of their announced plans. But others are due to global factors beyond our control that have negatively affected supply chains for foreign manufactured equipment, together with an exorbitant rise in shipping costs.

In summary we are at an exciting, albeit challenging, inflection point in our energy future, where we expect to see a radical increase in private power activity and significant investment of new fixed capital over the ensuing years.

**Paul Semple** Portfolio Manager

# The reality of SA's electricity crisis

## Part of a perfect storm of failures in the energy sector

South Africa's power sector is navigating an almost perfect storm of a growing electricity supply deficit, exacerbated by Eskom's deteriorating generation because of increasingly unreliable coal plants, resulting in skyrocketing electricity prices. Together, these forces are crippling the economy.

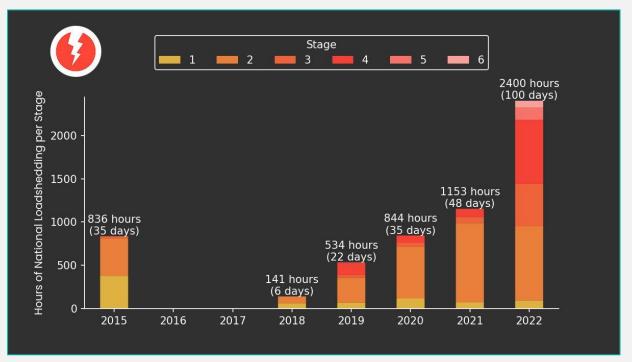
With the country emerging from a COVID-induced economic slowdown over the past two years, it is becoming clear that we have been lulled into a false sense of progress regarding the rollout of new energy generation.

The stark reality of the situation is alarming, with almost weekly load shedding and the possibility of stage 8 recently mentioned by the government. We are on track to break another record for the worst year of load shedding. By Eskom's own admission, load shedding so far for 2022 has already exceeded its predictions and is set to worsen in the months ahead.

Given the delayed roll-out of the emergency power procurement plan set to start a year ago and due to come online this month, Eskom has been forced to rely even more heavily on its diesel-fueled generators, at an enormous cost to the utility and ultimately the tax-payer. South Africa also faces growing pressure to transition to clean energy to meet environmental commitments and avoid punitive international trade terms.

See full article: www.futurearowth.co.za/insights/the-reality-of-sa-s-electricity-crisis

#### **HOURS OF LOAD SHEDDING FROM 2015 TO 2022**



Source: EskomSePush twitter page

# The reality of SA's electricity crisis

The first three projects under the RMIPPP programme concluded Power Purchase Agreements by Eskom in early June 2022, with financial close shortly thereafter, but most of the programme has stalled. Environmental issues and litigation plague the Karpowerships, and the pass-through of gas costs are now prohibitively expensive for Eskom.

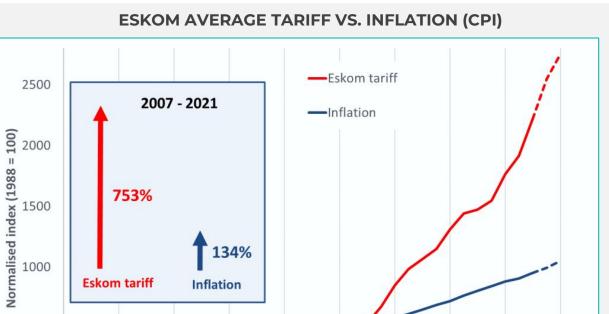
Many REIPPP Round 5 projects are struggling to close, given the significant price adjustments of engineering, procurement and construction contracts against the backdrop of the tight margins bid under the REIPPP programme. Despite already having registered with Nersa, dozens of new private power projects have delayed the start of their construction whilst waiting for clarity about connecting to Eskom's national grid for purposes of selling power to corporate and industrial off-takers.

The capacity of Eskom's national transmission grid is highly constrained in the Northern and Western Cape, limiting the potential for new projects to connect to the grid. Furthermore, the reliability of Eskom's coal plants is rapidly deteriorating.

Eskom's Energy Availability Factor (EAF) for the year to date has averaged less than 60%, and the trajectory is increasingly moving in the opposite direction to the 75% targeted EAF that was envisioned in the government's plans under the "Roadmap for Eskom in a Reformed Electricity Supply Industry". The increasing cost of maintaining Eskom's aging assets, together with the huge cost over-runs and interventions to address design flaws of mega coal plants Medupi and Kusile, has driven up the real cost of electricity by more than 600% over the past 15 years.

**Note**: The graph depicts overall average increases – actual increases will be different for different types of consumers (residential, commercial and industrial) and will vary between municipalities.

## **Execution stalls and costs soar**



2008 electricity

crisis

2015

2019

2011

Source: 2022 update: Eskom tariff increases vs inflation since 1988 (with projections to 2024) - PowerOptimal - the Future of Energy

2003

2007

Year

500

1987

1991

1995

1999



2023

# The reality of SA's electricity crisis

## How do we turn this dire situation around?

We urgently need to simplify and fast track the approvals to connect private embedded generation projects to the national grid through better coordination among Nersa, Eskom, the Department of Mineral Resources and Energy (responsible for electricity procurement), the Department of Public Enterprises (responsible for Eskom) and National Treasury.

To assist Eskom, private concessions should be given to Independent Power Producers to upgrade parts of the grid network where they need to connect. Independent Power Producers could achieve cost recoveries if the wheeling fees Eskom charges for using its grid network were reduced.

To expedite the financial close of Round 5, consideration should be given to granting a once-off adjustment to the tariffs to help projects address the unexpected increase in equipment supply costs. Doing so would arguably be cheaper than the cost to the economy for every additional day of load shedding, plus the cost of running diesel generators by Eskom.

Another update to the IRP is needed, given the delays in project closings and performance deterioration in Eskom's coal plants. This should include the increased allocation to electricity procurement from Independent Power Producers by municipalities in good financial standing, expected to be a growing factor in South Africa's electricity sector reform in the years ahead.

A formal plan to facilitate the use of Eskom's infrastructure by municipalities in good financial standing that wish to procure electricity directly from Independent Power Producers, and consumers who wish to sell power into the grid, would greatly assist in rolling out the decentralisation of power away from Eskom generation.

Requirements need to be concluded for Eskom to utilise the \$8.5 billion climate finance deal unveiled at the United Nations Climate Change Conference (COP26) in late 2021. This capital could be applied in a variety of uses such as grid upgrade expenditure or renewable investments by Eskom.

The updated IRP should include an increase in the speed and scale of developing additional renewables and battery storage.

### **Execution of these plans is the key to a brighter future**

There is an urgent need to fast track the build-out of new power generation to minimise the reliance on Eskom's coal plants and reduce the negative impacts of load shedding. Many positive factors support energy reform, including the extensive national grid infrastructure, significant amounts of private investment in the pipeline, South Africa's vast natural resources, and global support for the clean energy transition.

The key issue is prioritising, coordinating and executing decisions that are primarily still on paper. We cannot afford further delays; this is a national emergency for South Africa. We need to do more, faster. However, inflexible regulatory paradigms restrict private sector investors who have the capital, expertise, and the will to make a difference. Significant capital investment is required to upgrade/strengthen the grid. It cannot be left up to Eskom alone and offers an opportunity for public-private partnerships that will ultimately lead to a brighter future for our country.

## Fund facts



Portfolio manager	Paul Semple
Benchmark	South African STeFI Composite Index (STeFI)
Performance target	STeFI + 2.25% per annum before the deduction of taxes and fees, with income reinvested
Reg 28 classification	Debt instruments, predominantly unlisted instruments of unlisted entities
Investment focus	Debt and fixed income in energy related industries and sectors
Minimum investment	R50 million (at the manager's discretion)
Asset class	Fixed & variable rate debt instruments
Current structure	Pooled, open-ended
Fund start date	January 2013
Total Fund assets	R9.827 billion
Termination period	12 months (size dependent)

The Futuregrowth Power Debt Fund specialises in energy-related industries and sectors, and forms part of Futuregrowth's suite of developmental investments.

The Fund may invest in a wide range of debt instruments including those issued by government, parastatals and corporates, as well as securitised assets. The inclusion of assets is subject to credit committee approval.

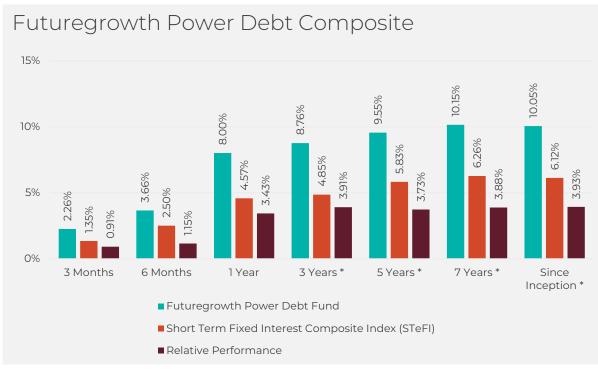
The Fund is largely invested in renewable energy deals that form part of the Department of Energy's Renewable Energy Independent Power Producer Procurement Programme (REIPPPP). All projects under the REIPPPP enter into an off-take purchase agreement with Eskom for the power they will produce during the next 20 years and these revenue streams will be used by the projects to repay the debt finance.

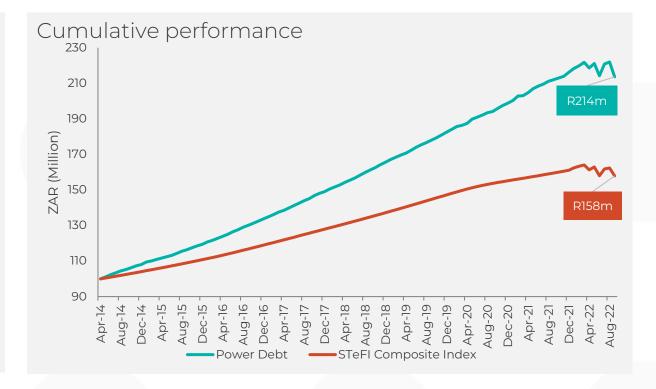
The Fund aims to provide investors with a vehicle that facilitates infrastructural, social, environmental and economic development in southern Africa through investments in energy-related businesses and sectors. These include electricity generation from renewable, alternative and traditional sources, power distribution and reticulation, and supporting industries and sectors.

The Fund delivers on a variety of social impact requirements such as: job creation through employing local labour to build and maintain the plants, SMME development through employing contractors, mentorship and skills transfer from international developers, meeting BEE equity requirements, investment by the projects into local socio-economic infrastructure and services, and compliance with the international Equator Principles.

## Investment performance

## Credit spread accrual is the main contributor





Data as 30 September 2022 // Since inception date (GIPS Composite): May 2014 Fund start date: December 2012 // Source: Futuregrowth // \*Annualised

The Power Debt Fund performance was attributed mainly to credit spread accrual earned on the debt deals secured over thirty-two renewable energy projects awarded under the Renewable Energy Independent Power Producer Procurement Programme (REIPPPP). New debt issuance in the market remained subdued given the challenges to achieve financial close by preferred bidders under the recent REIPPPP Bid Window 5 and the Emergency Round, respectively. The nominal interest rate position of the Fund detracted from performance as interest rates moved higher to account for the synchronised monetary policy hiking cycle by developed market central banks to ward off persistent consumer price inflation. The Fund's inflation-linked bond and floating rate exposure positively contributed to quarterly relative returns. Over the past year, there has been a contraction in the average yield enhancement due to the refinance of debt deals at reduced interest margins by eleven REIPPPP projects investments held by the Fund. The performance of these projects is now largely established, with most evidencing at least seven years of operations. The refinanced debt reflects the improved risk profile and the shorter remaining term to maturity compared to the original debt profiles.

## Key qualifying criteria for projects under the REIPPP programme

The REIPPPP was born in 2012 out of a need and desire to procure alternative, sustainable energy, while simultaneously contributing to social and economic development in South Africa. It allows Independent Power Producers (IPPs) to submit competitive bids to design, develop and operate large-scale renewable energy power plants across South Africa. As a pre-requisite for submitting bids to the REIPPPP, IPPs must show how their project will deliver social and economic development for South Africans.













- +/- 70% of the bid evaluation weighted towards the bid tariff.
- Tariffs awarded in later rounds of the programme have dropped significantly compared to the first round.
- Minimum of 50% of staff must be RSA citizens, with target of 80%.
- At least 45% of the project's construction materials and services must be procured in SA.
- At least 30% BEE shareholding requirement for the IPP.
- At least 2.5% must be held by a trust representing the local community.

Clean & renewable generation



Employment & skills transfer



Infrastructural investment & empowerment



- Environmental Impact Assessment of the proposed site and impact of the project required.
- Renewable energy projects do not use fossil fuels, create toxic emissions or hazardous waste.
- Many international developers have partnered with local firms to develop projects, resulting in a high level of mentorship and skills transfer from the international developers.
- Many of the projects are constructed in remote arid areas where access roads are required for the construction and operation of the project.
- BEE requirements result in local community empowerment.

## Geographic diversity & technology capacity

The Fund is invested in a diversity of renewable energy deals, with **R8 billion** in committed deals across 31 projects (out of 117 awarded PPAs under REIPPPP Bid Windows 1 - 5).

Wind R4.4bn

1 429 MW

Solar PV R1.6bn



Solar CSP R2.4bn



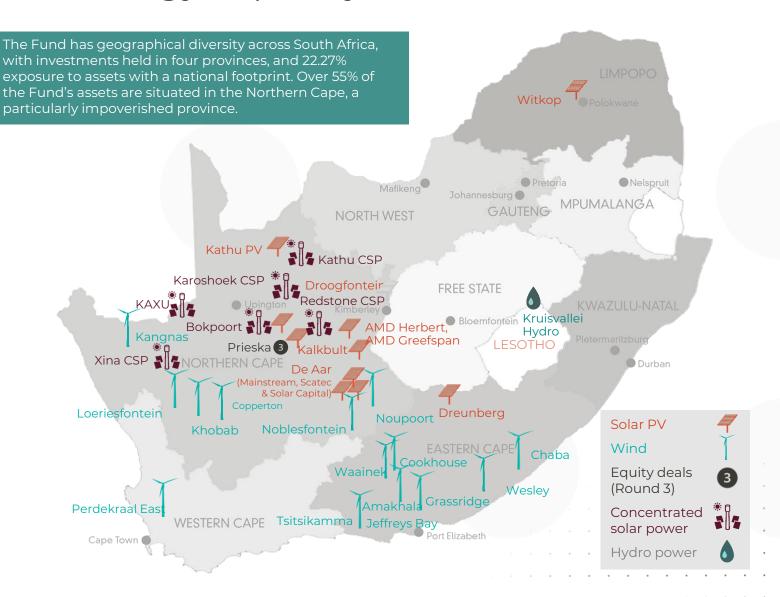
550 MW

Small Hydro R0.1bn

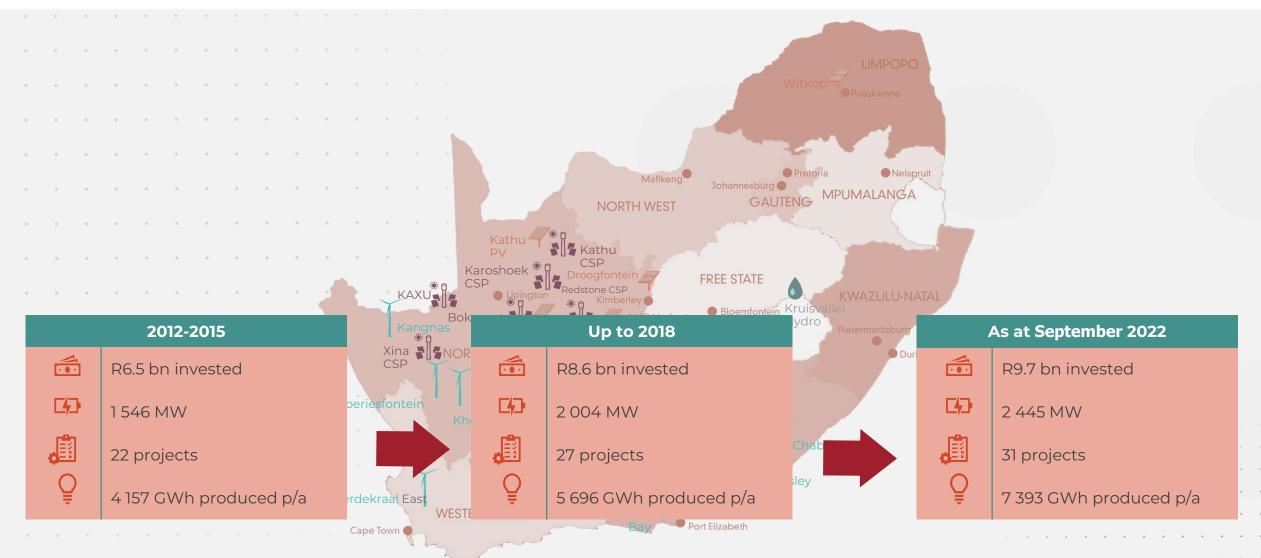


3.8 MW

Region	% exposure
Northern Cape	55.29%
Eastern Cape	15.42%
Western Cape	4.84%
Limpopo	1.57%
Lesotho	0.60%
National	22.27%
Total	100%



# Transitioning to a green economy through renewable energy



## Our developmental investment philosophy

#### **Developmental product suite**

Futuregrowth has a 25-year-plus track record of investing in developmental assets. Our funds provide finance to institutions that may not typically receive support from the traditional banking or lending process. In addition to providing finance (credit), we also invest in equity and retail property with a developmental nature.

Our developmental funds are part of our broader responsible investment strategy and reflect the intention of our clients to do good by investing consciously to make a positive impact on society and the broader environment, and thereby to safeguard our collective future.

Our suite of developmental funds consists of:

- Fixed Income (Infrastructure & Development Bond Fund, Power Debt Fund, Inflation-Linked Debt Fund);
- Unlisted equity (Development Equity Fund, Agri Funds);
- Unlisted retail property (Community Property Fund); and
- Fund of funds incorporating our suite of development funds as building blocks (Developmental Balanced Fund).

Futuregrowth is dedicated to the development and empowerment of South Africa and its people. We are constantly looking for opportunities that will yield optimal financial returns for investors while making a meaningful difference. As such, we have become a reliable channel for investor savings and promoting national development.

We define developmental investing as financing that a) provides investors with commercial returns and b) produces a social and developmental impact. In South Africa the primary focus is on the provision of basic services and improvement of infrastructure development.

In order to achieve sustainable, long-term, benchmark-beating performance, we apply a responsible investment filter when screening and analysing new deals for our developmental funds. This is supported by a robust credit process that considers both financial and non-financial risks.

#### **Global contribution**

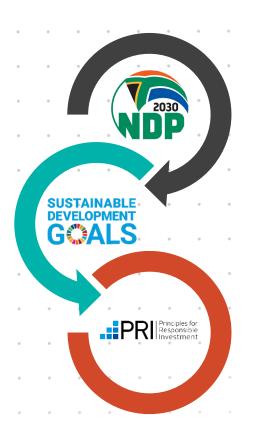
We are also aligned with the UN's Sustainable Development Goals (SDGs), thus contributing to this global "blueprint to achieve a better and more sustainable future for all". The SDGs are covered in detail later in this report, where we link the activities of each deal featured to these global targets.

(See: www.un.org/sustainabledevelopment/sustainabledevelopment-goals/)



## How we measure and manage impact

Futuregrowth actively measures and manages for impact. Our impact measurement and management approach is aligned with both global and local development frameworks.



## **National Development Plan (NDP)**

This is a long-term development framework for the elimination of poverty and reducing inequality in South Africa by 2030.

### **UN Sustainable Development Goals (SDGs)**

These goals represent the globally agreed 2030 agenda and are a call to action to end poverty, protect the planet and ensure that all people enjoy peace and prosperity.

### **Principles for Responsible Investing (PRI)**

Futuregrowth is a signatory to the Principles for Responsible Investment (PRI), which is an international network of signatories contributing to developing a more sustainable global financial system by incorporating six defined Principles for Responsible Investment into investment practice.

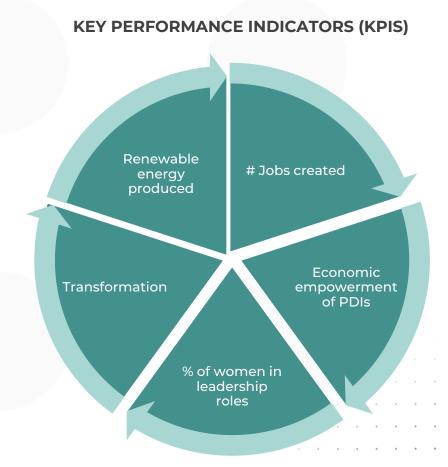
## Priority outcomes & KPIs

We have priority outcomes that reflect the critical social and economic changes our clients and stakeholders would like to see. Throughout our engagement with companies, we track core metrics, using key performance indicators (KPIs) outlined below, which can be reported on a company, sector, portfolio (Fund) and aggregated AUM level - to enable us to report on the impact achieved.

## **Avoiding GHG\*** Job creation emissions Local economic development **Transformation**

**Gender equality** 

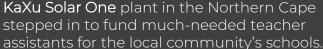
**PRIORITY OUTCOMES** 



\*Greenhouse Gas

## The Futuregrowth Power Debt Fund

## Making a meaningful impact







De Aar Solar Power is funding the Big Shake-up Accelerator Programme, a rural training programme that aims to equip entrepreneurs with opportunities and skills to run a business, regardless of their level of education.

Red Rocket is committed to supporting communities in the Clarens/Kgubetswana region through the Kruisvallei Hydro Project through initiatives that create jobs and better opportunities for all residents.





Droogfontein's socio-economic and enterprise development (SED) programmes have invested in various educational programmes, including early childhood development, school literacy and numeracy support programmes and health services.

## Social & developmental impact across the Fund

#### Job creation









1043 Direct jobs created

5 168

Indirect jobs created

83%

Of jobs created are held by blacks

51%

Of jobs created are held by youth

## Development impact







R258m

Total spend on Socio-Economic Development (SED) and Enterprise Development (ED)

133

Total number of projects supported through SED and ED spend

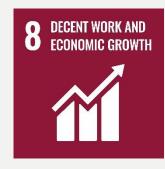
212

Total number of SMMEs supported through SED and ED initiatives

### The Fund's IMPACT across SDGs

Our clients' investments contribute directly to six SDGs













Disclaimer: Data collected in August 2021 from a sample of 28 investee companies in the Fund

## Developing communities

# Socio-Economic Development (SED) and Enterprise Development (ED) spend

The launch of the Renewable Energy Independent Power Producer Procurement Programme (REIPPPP) has unlocked opportunities for social and economic development for the communities within close proximity to the renewable energy projects.

Through sources of grant funding and financing exciting opportunities, the projects are creating jobs and resulting in much needed socio-economic development in the communities they are located in, which are typically situated in remote areas of South Africa that mired in poverty and don't have many opportunities for social upliftment and economic growth.

Community development is a pre-requisite for all projects under the REIPPPP. Each renewable energy project contributes a percentage of its revenues towards Socio-Economic Development (SED) and/or Enterprise Development (ED) initiatives within a 50 km radius from the project, with the aim to create a lasting improvement in the living standards of the people in the local community.

Some of the projects supported through the SED and/or ED spend in the Power Debt Fund include:

- SMME development
- Mentorship, coaching and development capital to empower small businesses and projects
- Initiatives that have a significant impact on the lives of young people
- Internship programmes that promote skills transfer and the creation of employment opportunities
- Development capital for the implementation of education, health, sports, arts and cultural programmes.

Since the launch of the REIPPPP in 2011, Futuregrowth (on behalf of its clients) has financed 31 renewable energy projects with investments held in five provinces across different technologies. Futuregrowth recognises the positive impact these power projects play in developing communities and we actively track and report on the SED and/or ED spend, and various initiatives supported by these projects as demonstrated in page 16 of this report.

### SDG contribution of SED and/or ED spend



**SDG 1**: End poverty in all its forms everywhere..

**1.4:** "By 2030, ensure that all men and women, in particular the poor and the vulnerable, have equal rights to economic resources, as well as access to basic services, ownership and control over land and other forms of property, inheritance, natural resources, appropriate new technology and financial services, including microfinance".



**SDG 8**: Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all..

**8.5:** "By 2030, achieve full and productive employment and decent work for all women and men, including for young people and persons with disabilities, and equal pay for work of equal value".



**SDG 9:** Promote financial, social and economic inclusion for all in order to promote inclusive growth and reduce inequalities..

**9.3:** "Increase the access of small-scale industrial and other enterprises, in particular in developing countries, to financial services, including affordable credit, and their integration into value chains and markets".



**SDG 10:** Create an enabling environment for local businesses, both big and small to reach consumers easily without limitations..

**10.2:** "By 2030, empower and promote the social, economic and political inclusion of all, irrespective of age, sex, disability, race, ethnicity, origin, religion or economic or other status".

## Key features Power Debt Fund

R9.827bn

Commercial risk-adjusted returns

Investments in electricity generation from renewable and alternative sources

Active in **4 provinces** 

## Job creation

- Employing local labour to build and maintain the plants;
- Short- and long-term job creation; and
- SMME development through employing contractors.

Over 88% of the Fund is invested in rural areas

## Skills transfer

- High level of mentorship and skills transfer from international developers; and
- International developers partnering with local firms.

Supports six
Sustainable
Development
Goals

## Contact information

#### **INVESTMENT TEAM**

### Paul Semple Portfolio Manager

pauls@futuregrowth.co.za T +27 21 659 5424

#### **Angelique Kalam**

angeliquek@futuregrowth.co.za T +27 21 659 5483

#### **CLIENT RELATIONSHIP TEAM**

#### Maseabi Marageni

mmarageni@futuregrowth.co.za C +27 84 837 7295

#### **Steffen Josephs**

sjosephs@futuregrowth.co.za C +27 83 327 3543

#### **Mzukisi Ralawe**

MRalawe@futuregrowth.co.za C +27 82 809 2013

#### **Ziyanda Tshaka**

ziyandat@futuregrowth.co.za C +27 83 666 0392

#### **Marilyn Gates Garner**

marilyng@futuregrowth.co.za C +27 82 466 0868

#### Disclaimer

Futuregrowth Asset Management (Pty) Ltd ("Futuregrowth") is a licensed discretionary financial services provider, FSP 520, approved by the Registrar of the Financial Sector Conduct Authority to provide intermediary services and advice in terms of the Financial Advisory and Intermediary Services Act 37 of 2002. The fund values may be market linked or policy based. Market fluctuations and changes in exchange rates may have an impact on fund values, prices and income and these are therefore not guaranteed. Past performance is not necessarily a guide to future performance. Futuregrowth has comprehensive crime and professional indemnity in place. Performance figures are sourced from Futuregrowth and IRESS. This document is for information purposes only and is not intended as an offer or recommendation to buy or sell or a solicitation of an offer to buy or sell a financial product or security. The recipient is advised to assess the information with the assistance of an advisor if necessary, with regard to its compatibility with his/her own circumstances in view of any legal, regulatory, tax and other implications. Personal trading by staff is restricted to ensure that there is no conflict of interest. All employees of Futuregrowth has remunerated with salaries and standard short and long-term incentives. No commission or incentives are paid by Futuregrowth to any persons. All inter-group transactions are done on a ram's length basis. Futuregrowth has comprehensive crime and professional indemnity insurance. Futuregrowth prepared this document in good faith. Although the information in this document is based on sources considered to be reliable, Futuregrowth makes no representation or warranty, express or implied, as to the accuracy or completeness of this document, nor does it accept any liability which might arise from making use of this information.

## **FUTUREGROWTH**

/ ASSET MANAGEMENT

- 3rd Floor, Great Westerford 240 Main Road, Rondebosch
- 7700, South Africa
  Private Bag X6, Newlands, 7725, South Africa
- Tel: +27 21 659 5300 Fax: +27 21 659 5400

www.futuregrowth.co.za

#### Directors

GL Gobodo (Chairman) PE Rackstraw (Managing Director)

- AC Canter\* H Beets\*\* P Moodley S Mabaso-Koyana
  - \*American \*\*Netherlands Reg No. 1996/018222/07
- A licensed Financial Services Provider

